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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,299	10/31/2003	Sinikka Sarkkinen	061604-0251	9873
30542 7590 01/02/2008 FOLEY & LARDNER LLP P.O. BOX 80278 SAN DIEGO, CA 92138-0278			EXAMINER NGUYEN, KHAI MINH	
			ART UNIT 2617	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/697,299

Applicant(s)

SARKKINEN ET AL.

Examiner

Khai M. Nguyen

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6/9/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The references listed in the Information Disclosure Statement filed on 6/9/2004 have been considered by examiner (see attached PTO-1449 form or PTO/SB/08A and 08B forms).

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 35 and 36 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The language of the claim raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

Claims 35 and 36, claims the non-statutory subject matter of a *computer* program. Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1754 (claim to a data structure per se held nonstatutory). Therefore, since the claimed programs are not tangibly embodied in a physical medium and encoded on a computer-readable medium then the Applicants has not complied with 35 U.S.C 101.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 17-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Toth et al. (U.S.Pat-7107066).

Regarding claim 17, Toth teaches a terminal device for establishing a link between a service context of a service provided to said terminal device and a connection for providing said service from a data network to said terminal device (fig.3-5, col.5, line 50 to col.6, line 67), said terminal device setting up said connection (fig.3-5, col.5, line 50 to col.6, line 2) and to forward a service indication via said connection in response to a service notification received from said data network (fig.3-5, col.5, line 50 to col.6, line 67).

Regarding claim 18, Toth teaches a device according to claim 17, wherein said terminal device forwards said service indication in a message used for signaling a connection request or a connection completion (fig.3-5, col.5, line 50 to col.6, line 67).

Regarding claim 19, Toth teaches a device according to claim 17, wherein said terminal device forwards said service indication in a dedicated message (see Toth, col.7, lines 18-34).

Regarding claim 20, Toth teaches a device according to claim 19, wherein said message is an RRC message (fig.3-5, multicast report (step 1)).

Regarding claim 21, Toth teaches a device according to claim 17, wherein said terminal device forwards said service indication in a direct transfer message (fig.3-5, col.5, line 50 to col.6, line 67).

Regarding claim 22, Toth teaches a device according to claim 17, wherein said terminal device is a mobile terminal (fig.1, mobile stations).

Regarding claim 23, Toth teaches a network controlling device for establishing a link between a service context created by a data network and a terminal connection (fig.3-5, col.5, line 50 to col.6, line 67), said network controlling device forwarding to said data network a service indication received via said terminal connection (fig.3-5, col.5, line 50 to col.6, line 67), and to establish said link on the basis of a network response received in response to said forwarded service indication (fig.3-5, col.5, line 50 to col.6, line 67).

Regarding claim 24, Toth teaches a device according to claim 23, wherein said network controlling device extracts said service indication from a connection request or connection complete message or from a dedicated message (col.7, lines 18-34).

Regarding claim 25, Toth teaches a device according to claim 24, wherein said messages are RRC messages (fig.3-5, multicast report (step 1)).

Regarding claim 26, Toth teaches a device according to claim 23, wherein said network controlling device forwards said service indication in a direct transfer message received via said terminal connection (fig.3-5, col.5, line 50 to col.6, line 67).

Regarding claim 27, Toth teaches a device according to claim 23, wherein said network controlling device forwards said service indication in a RANAP message (col.7, lines 18-34).

Regarding claim 28, Toth teaches a device according to claim 27, wherein said RANAP message is an Initial UE message (col.7, lines 18-34).

Regarding claim 29, Toth teaches a device according to claim 23, wherein said network controlling device adds said service indication into an active set of terminal connections (abstract) and generates an association between said terminal connection and said service context (col.5, line 50 to col.6, line 67).

Regarding claim 30, Toth teaches a device according to claim 23, wherein said network controlling device is an RNC (fig.3, RAN).

Regarding claim 31, Toth teaches a system for establishing a link between a service context and a terminal connection, said system comprising a terminal device according to claim 14 and a network controlling device according to claim 20 (col.5, line 50 to col.6, line 67).

Regarding claim 32, Toth teaches a method according to claim 3, wherein said message is an RRC message (fig.3-5, multicast report (step 1)).

Regarding claim 33, Toth teaches a method according to claim 6, wherein said enhanced message is a RANAP message (col.7, lines 18-34).

Regarding claim 34, Toth teaches a method according to claim 9, wherein said network node is an SGSN (fig.3, SGSN, claim 3).

Regarding claim 35, Toth teaches a computer program stored on a storage medium which, when executed on a processor of a terminal device, causes the performing of the steps of:

establishing a link between a service context of a service provided to the terminal device (fig.3-5, col.5, line 50 to col.6, line 67);

establishing a connection for providing said service from a data network to the terminal (fig.3-5, col.5, line 50 to col.6, line 67); and

forwarding a service indication via the connection in response to a service notification received from the data network (fig.3-5, col.5, line 50 to col.6, line 67).

Regarding claim 36, Toth teaches a computer program stored on a storage medium which, when executed on a processor of a network controlling device, causes the performing of the steps of:

establishing a link between a service context created by a data network and a terminal connection (fig.3-5, col.5, line 50 to col.6, line 67);

forwarding to said data network a service indication received via said terminal connection (fig.3-5, col.5, line 50 to col.6, line 67); and

establishing the link on a basis of a network response received in response to said forwarded service indication (fig.3-5, col.5, line 50 to col.6, line 67).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1-11 and 13-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toth et al. (U.S.Pat-7107066) in view of Hans, Sebastian, Juergen (WO 01/80525).

Regarding claim 1, Toth teaches a method of linking a service context to a terminal connection in a network controlling device of a data network, said method comprising the steps of:

a) broadcasting a service notification from said data network as a result of a network-initiated creation of said service context (fig.3-5, col.5, line 50 to col.6, line 8);

b) setting up said terminal connection towards said network controlling device in response to a receipt of said service notification (fig.3-5, multicast report response (step 6), col.8, line 9 to col.9, line 2);

c) forwarding a service indication via said terminal connection to said data network (col.5, line 63 to col.6, line 2);

d) receiving from a subscriber control element a confirmation of authorized service activation (not show) (col.5, line 50 to col.6, line 67); and

e) establishing an association between said service context and said terminal connection based on a network response to said service indication (col.5, line 50 to col.6, line 67).

Toth fails to specifically disclose authorized service activation. However, Hans teaches authorized service activation (page 1, line 26 to page 3, line 9). Therefore, it

would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Hans to Toth to provide an improved method of providing secure access to resources via a network.

Regarding claim 2, Toth and Hans further teach a method according to claim 1, wherein said service indication is forwarded in a dedicated service indication message (see Toth, col.7, lines 18-34).

Regarding claim 3, Toth and Hans further teach a method according to claim 1, wherein said service indication is forwarded in a message used for signaling a connection request or connection completion of said terminal connection (see Toth, col.5, line 50 to col.6, line 67).

Regarding claim 4, Toth and Hans further teach a method according to claim 2, wherein said message is an RRC message (see Toth, fig.3-5, multicast report (step 1)).

Regarding claim 5, Toth and Hans further teach a method according to claim 1, further comprising the step of forwarding an enhanced message from said network controlling device to a network node having initiated said service context creation (see Toth, col.5, line 50 to col.6, line 67), said enhanced message requesting confirmation of authorization of the service of said service context (see Hans, page 1, line 26 to page 3, line 9).

Regarding claim 6, Toth and Hans further teach a method according to claim 1, wherein said network response is an acknowledgement of said confirmation request (see Hans, page 1, line 26 to page 3, line 9).

Regarding claim 7, Toth and Hans further teach a method according to claim 1, wherein said confirmation of authorized service activation is provided by said subscriber control element upon a joining phase for multicast activation (see Toth, abstract, see Hans, page 1, line 26 to page 3, line 9).

Regarding claim 8, Toth and Hans further teach a method according to claim 5, wherein said enhanced message is a RANAP message (see Toth, col.7, lines 18-34).

Regarding claim 9, Toth and Hans further teach a method according to claim 1, wherein said service indication is forwarded in a direct transfer message to a network node having initiated said service context creation (see Toth, fig.3-5, col.5, line 50 to col.6, line 8).

Regarding claim 10, Toth and Hans further teach a method according to claim 5, wherein said network node is an SGSN (see Toth, fig.3, claim 3).

Regarding claim 11, Toth and Hans further teach a method according to claim 7, wherein said subscriber control element is an SGSN, or a GGSN, or a network element controlled by a service provider (see Toth, fig.3).

Regarding claim 13, Toth and Hans further teach a method according to claim 1, wherein said terminal connection is an RRC connection (see Toth, col.5, line 50 to col.6, line 67).

Regarding claim 14, Toth and Hans further teach a method according to claim 1, wherein said service context is a multicast or broadcast multimedia service context (see Toth, col.5, line 50 to col.6, line 67).

Regarding claim 15, Toth and Hans further teach a method according to claim 1, wherein said establishing step comprises adding said service indication into an active set of terminal connections (see Toth, fig.3-5) and generating an association between said terminal connection and said service context (see Toth, col.5, line 50 to col.6, line 67).

Regarding claim 16, Toth and Hans further teach a method according to claim 1, further comprising the step of releasing said terminal connection if said network response indicates that the service of said service context is not confirmed (see Toth, col.8, lines 25-38).

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Toth et al. (U.S.Pat-7107066) in view of Hans, Sebastian, Juergen (WO 01/80525) and further in view of XP-002271691 (ETSI TS 122 146 version 5.2.0 release 5 (Universal Mobile Telecommunications System (UMTS); Multimedia Broadcast/Multicast Service (MBMS))).

Regarding claim 12, Toth and Hans further teach a method according to claim 11,

Toth and Hans fail to specifically disclose wherein said service provider is an external agent who is responsible of producing the multicast/broadcast services. However, XP-002271691 teaches wherein said service provider is an external agent who is responsible of producing the multicast/broadcast services (section 4.2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of XP-002271691 to Hans and Toth to decrease the amount of data within the network and use resources more efficiently.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khai M. Nguyen whose telephone number is 571.272.7923. The examiner can normally be reached on 8:00-5:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rafael Perez-Gutierrez can be reached on 571.272.7915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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12/18/2007